

Appl. No. 10/500,523
Amdt. Dated March 20, 2006
Reply to Office Action of December 19, 2005

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application:

Claim 1 (Currently Amended): A motorized recreational vehicle with living space and storage space comprising:

a vehicle body of unibody construction having an front end, bottom, sidewalls, and top, and being further configured with an openable rear end and an access door proximate said front end,

at least one rear wheel suspension system comprising independently mounted first and second rear wheels, and

at least one storage area disposed within said vehicle body between said first and said second rear wheels; said storage area at least partially extending between said bottom and said floor structure, said storage area being accessible at least through said openable rear end.

Claim 2 (Previously Presented): A motorized recreational vehicle according to claim 12, a floor of said extendible component when said extendible component is fully extended being substantially level with said floor structure of said living compartment.

Claim 3 (Original): A motorized recreational vehicle according to claim 2, said floor structure comprising

at least one retractable floor panel and floor panel operating mechanism configured such that when said extendible components are extended, said floor panel is extendible to and is supportable in a position flush with said interior surface of said floor of said extendible component, and such that said floor panel is retractable beneath the level of said floor of said extendible component for retraction of said extendible component.

Claim 4 (Original): A motorized recreational vehicle according to claim 3, said floor panel operating mechanism comprising a fixed floor panel inboard edge support, a floor panel lifting mechanism, and a retractable floor panel outboard edge support.

Appl. No. 10/500,523
Amdt. Dated March 20, 2006
Reply to Office Action of December 19, 2005

Claim 5 (Original): A motorized recreational vehicle according to claim 4, said floor panel lifting mechanism comprising at least one pneumatic actuator disposed between said floor structure and said floor panel.

Claim 6 (Currently Amended): A motorized recreational vehicle according to claim 1, further comprising: a driver's steering console at a driver's station connected to a steerable front wheel suspension system providing directional control capability for said vehicle, said ~~drivers~~ driver's steering console being retractable from said driver's station when not in use.

Claim 7 (Original): A motorized recreational vehicle according to claim 1, said storage area extending vertically upward behind said living compartment.

Claim 8 (Original): A motorized recreational vehicle according to claim 7, said storage area comprising upper and lower levels within said storage area and a mechanism for elevating objects from ground level to said upper level.

Claim 9 (Original): A motorized recreational vehicle according to claim 7, comprising a rear end ramp extendible to ground level for delivering and removing a vehicle into and out of said storage area.

Claim 10 (Canceled)

Claim 11 (Canceled):

Claim 12 (Currently Amended): A motorized recreational vehicle said vehicle comprising:
at least one expandable living compartment disposed within a vehicle body;
said expandable living compartment comprising at least one extendible component having first, second, and third walls, a floor and a roof, said walls, floor and roof each having

Appl. No. 10/500,523
Amdt. Dated March 20, 2006
Reply to Office Action of December 19, 2005

interior and exterior surfaces and inboard and outboard sides, said extendible component being extendible from within said living compartment through a respective sidewall opening of said vehicle body;

wherein said inboard edge of said roof of said extendible component is configured to mate with the outboard edge of said interior of said top of said vehicle body thereby forming a substantially flush joint providing a continuous ceiling profile and a continuous exterior top profile extending across said expandable living compartment;

said inboard edge of said roof of said extendible component comprising an inwardly directed, upwardly biased, downwardly deformable interior flap,

said outboard edge of the top within said sidewall opening comprising a hinged exterior flap,

said hinged exterior flap lying secured against the exterior surface of the outboard wall of said extendible component and said interior flap normally contacting the interior surface of said top when said extendible compartment is retracted,

said interior flap being deformable downward for clearance and said exterior flap being free for outward motion during extension of said extendible component,

said interior flap being reformable upward for engagement with said outboard edge of said top, said exterior flap being disposed proximate thereto thereby forming said joint.

Claim 13 (Canceled).

Claim 14 (Currently Amended): A motorized recreational vehicle according to claim ~~12~~ 13, said deformable interior flap comprising a first and second stressed skins defining a longitudinal chamber within, said chamber comprising a variable volume by which at least one said skin may be deformed for upward and downward movement of said deformable flap.

Claim 15 (Original): A motorized recreational vehicle according to claim 14, said chamber is at least partially filled with compressible foam.

Appl. No. 10/500,523
Amdt. Dated March 20, 2006
Reply to Office Action of December 19, 2005

Claim 16 (Currently Amended): A motorized recreational vehicle according to claim 12 13, said vehicle further comprising a flexible membrane connecting the perimeter of said sidewall opening with said extendible component, thereby isolating the interior of said vehicle from the exterior of said vehicle with respect to said sidewall opening.

Claim 17 (Currently Amended): A motorized recreational vehicle according to claim 12 13, said vehicle body comprising stressed skin foam construction using substantially resilient foam materials between skins.

Claim 18 (Currently Amended): A motorized recreational vehicle comprising:
a vehicle body of substantially unibody construction from stressed skin foam core laminates having front end, bottom, sidewalls, and top;
a suspension system;
an engine and drive train;
a living compartment; and
wherein said motorized recreational vehicle has a wet weight that is less than 80% of a gross vehicle weight rating of said motorized recreational vehicle.

Claim 19 (Currently Amended): A motorized recreational vehicle according to claim 18, said motorized recreational vehicle having a wet weight that is less than 65% of said gross vehicle weight rating of said motorized recreational vehicle.

Claim 20 (Canceled).

Claim 21 (Currently Amended): The motorized recreational vehicle according to claim 18 20 wherein said foam core laminates are bonded together using a high density foam bond.

Claim 22 (Currently Amended): The motorized recreational vehicle according to claim 18 20 wherein said foam core laminates have interior and exterior skins, said skins having a plurality of

Appl. No. 10/500,523
Amdt. Dated March 20, 2006
Reply to Office Action of December 19, 2005

window apertures for the mounting of windows, each said window aperture having an integral edge flange, said apertures in said exterior skin being smaller than respective said apertures in said interior skin thereby resulting in a gap between respective said edge flanges, said gap being filled with a thermally non-conductive material.

Claim 23 (Original): The motorized recreational vehicle of claim 18 further comprising a plurality of pockets within said sidewalls and front end of said vehicle body, said pockets configured to receive stowable side windows and a stowable windshield.

Claim 24 (Original): A deformable member comprising
a variable volume chamber having anterior and posterior ends, enclosed by at least two flexible surface skins and anterior and posterior flexible membrane chamber ends, each said skin having a length and parallel first and second ends to said length, said first skin being longer than said second skin, said first ends joined in a fixed, parallel relationship, said second ends joined in a fixed, parallel relationship, and
a control for manipulating the volume of said chamber such at least one skin is placed in a concave configuration of variable radius.

Claim 25 (Original): A deformable member according to claim 24, a portion of said volume comprising a flexible, non-compressible material.

Claim 26 (Original): The deformable member of claim 24 wherein said deformable member is disposed within a fluid as a flow control surface.

Claim 27 (Original): The deformable member of claim 24, wherein said first ends are attached to a reference structure.

Claim 28 (Original): The deformable member of claim 24, wherein at least one of said anterior and posterior ends of said deformable member are attached to a reference structure.

Appl. No. 10/500,523
Amdt. Dated March 20, 2006
Reply to Office Action of December 19, 2005

Claim 29 (Original): The deformable member of claim 26 wherein said flow control surface is chosen from the group of fluid flow control surfaces consisting of wings, ailerons, stabilizers, elevators, rudders, vanes, valves, shunts, and trim control flaps.

Claim 30 (Original): The deformable member of claim 24 wherein said deformable member is a propulsion mechanism for use in a fluid medium.

Claim 31 (Original): The deformable member of claim 24 wherein said deformable member forms at least part of a roof of a slide out component of a motorized recreational vehicle.

Claim 32 (Original): The deformable member of claim 31 wherein said slide out has anterior and posterior walls having interior and exterior skins, said exterior skins being elastically connected to said anterior and posterior ends of said deformable member by exterior side wall membranes extending from said flexible membrane chamber ends, said interior skins connected to said deformable member by interior elastic membranes.

Claim 33 (Original): A motorized recreational vehicle comprising:

- a vehicle body of substantially unibody construction having front end, bottom, sidewalls, rear and top;
- a suspension system;
- an engine and drive train;
- a living compartment; and
- at least one storage compartment below the floor of the living compartment, at least a portion of said storage compartment configured as a garage accessible to at least one automobile through an openable hatch disposed in said rear of said vehicle body.

Claim 34 (Canceled)

Appl. No. 10/500,523
Amdt. Dated March 20, 2006
Reply to Office Action of December 19, 2005

Claim 35 (Canceled)

Claim 36 (Canceled)

Claim 37 (Currently Amended): The motorized recreational vehicle of claim ~~36~~33 wherein said automobiles are chosen from the group of automobiles consisting of sub-compact cars, compact cars, midsize cars, sports cars, sport utility vehicles, light pick-up trucks, and full size cars.

Claim 38 (Original): The motorized recreational vehicle of claim 33 wherein said hatch is configured to act as a ramp for the loading of said automobile.

Claim 39 (Original): The motorized recreational vehicle of claim 38 wherein said automobile is secured to said ramp and raised to a vertical orientation with the closing of said hatch.

Claim 40 (Currently Amended): The motorized recreational vehicle of claim ~~34~~33 wherein said garage further comprises upper and lower levels disposed posterior to said living compartment.

Claim 41 (Canceled).

Claim 42 (Original): An expandable living compartment in a motorized recreational vehicle, said living compartment comprising:

an elevated portion of said motorized recreational vehicle, said portion comprising a roof, floor, front end, back end, and first and second side walls,

~~at least one~~ opposing first and second extendible components, said components having interior and exterior surfaces, and being disposed within an aperture in ~~at least one~~ opposing first and second said side walls;

said floor comprising a floor panel support structure and at least one floor panel of which at least one outboard edge is movable by means of at least one actuator from a lower, downward sloping configuration wherein said ~~at least one~~ first and second extendible components may be

Appl. No. 10/500,523
Amdt. Dated March 20, 2006
Reply to Office Action of December 19, 2005

placed in a retracted position over said floor panel, to a raised, level configuration available only when said ~~at least one extendible components is~~ are extended, and such that when said first and second extendible components are retracted, floor sections of said first and second extendible components contact each other.

Claim 43 (Original): The expandable living compartment according to claim 42 further comprising a flexible skirt disposed around the circumference of said aperture and connecting said body of said vehicle to said exterior surfaces of said extendible component.

Claim 44 (Original): The expandable living compartment of claim 43 further comprising an air pressure source whereby the pressure within said expandable living compartment is elevated when said extendible component is being retracted or extended.

Claim 45 (Original): The expandable living compartment of claim 42 further comprising an access system disposed between said support structure and said movable floor panel whereby said moveable panel may be further lifted in a controlled way from said support structure so as to provide access under said moveable panel.

Claim 46 (Original): The expandable living compartment according to claim 42 wherein said actuator comprises at least one pneumatic bladder.

Claim 47 (Original): The expandable living compartment according to claim 42 further comprising a pneumatically actuated latch mechanism disposed between said floor panel and said support structure.

Claim 48 (Original): The expandable living compartment according to claim 42 further comprising parallel synchronous drivers disposed at four corners of said interior of said extendible component whereby said extendible component may be extended and retracted through a respective said sidewall opening.

Appl. No. 10/500,523
Amdt. Dated March 20, 2006
Reply to Office Action of December 19, 2005

Claim 49 (Original): The expandable living compartment according to claim 48 wherein said parallel synchronous drivers are concealed within said body of said vehicle and said extendible component.

Claim 50. (Canceled)

Claim 51 (Canceled)

Claim 52 (Original): The expandable living compartment according to claim 42 wherein said floor panel comprises a flexible floor panel supported along a centerline thereof by said support structure such that opposing said outboard edges rest in said lower, downward sloping configuration until elevated by said at least one actuator.

Claim 53 (Canceled): ~~The motorized recreational vehicle of claim 1 further comprising a windshield aperture and an openable windshield assembly.~~

Claim 54 (Canceled): ~~The motorized recreational vehicle of claim 53, said windshield aperture configured with a retractable screen assembly.~~